

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (CURRENTLY AMENDED) An ink jet recording apparatus, comprising:

a ~~at least one~~ main tank, which stores ink therein; and
a plurality of sub tanks, communicated with said ~~at least one~~ main tank, each sub tank storing ink supplied from said ~~at least one~~ main tank, and being communicated with at least one recording head.

2. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 1, wherein a plurality of main tanks are provided such that each of the main tanks is communicated with a plurality of the sub tanks.

3. (ORIGINAL) The ink jet recording apparatus as set forth in claim 1, wherein the sub tanks are arranged in a vertical direction.

4. (PREVIOUSLY PRESENTED) The ink jet recording apparatus as set forth in claim 1, wherein at least one of said sub tanks is airtightly formed by a material having flexibility so that a volume of said at least one sub tank is variable.

5. (PREVIOUSLY PRESENTED) The ink jet recording apparatus as set forth in claim 1, further comprising:

a first ink amount detector, which detects an ink amount stored in at least one of said sub tanks; and

a first supply amount controller, which controls a supply amount of ink flowing into said at least one sub tank, based on a detection of the first ink amount detector.

6. (ORIGINAL) The ink jet recording apparatus as set forth in claim 5, wherein the first supply amount controller is provided as a first valve member.

7. (PREVIOUSLY PRESENTED) The ink jet recording apparatus as set forth in claim 6, wherein:

the first valve member is opened when the first ink amount detector detects an ink low state in which the ink amount stored in the at least one sub tank is at a first predetermined level or less; and

the first valve member is closed when the first ink amount detector detects an ink full state in which the ink amount stored in the at least one sub tank is at a second predetermined level or more.

8. (PREVIOUSLY PRESENTED) The ink jet recording apparatus as set forth in claim 1, wherein at least one of said sub tanks is communicated with a plurality of recording heads.

9. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 1, wherein the ~~at least one~~ main tank and the sub tanks are arranged so as to provide a head difference therebetween, to supply ink from the ~~at least one~~ main tank to the sub tanks.

10. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 1, wherein the ~~at least one~~ main tank is compressed to supply ink to the sub tanks.

11. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 10, wherein the ~~at least one~~ main tank is compressed by a pump member.

12. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 11, wherein the pump member is connected to the ~~at least one~~ main tank via an air releaser which opens the ~~at least one~~ main tank to an atmosphere.

13. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 6, further comprising a second supply amount controller, which controls a supply amount of ink flowing out of the ~~at least one~~ main tank.

14. (ORIGINAL) The ink jet recording apparatus as set forth in claim 13, wherein the second supply amount controller is provided as a second valve member.

15. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 14, wherein the second valve member is first opened while the ~~at least one~~ main tank is compressed, and then the first valve member is opened to supply ink to the at least one subtank.

16. (CURRENTLY AMENDED) The ink jet recording apparatus as set forth in claim 14, wherein the first valve member is first closed and the compressing of the ~~at least one~~ main tank is canceled when the at least one subtank is replenished, and the second valve member is then closed.

17. (PREVIOUSLY PRESENTED) The ink jet recording apparatus as set forth in claim 4, wherein each subtank contains a plate member which prevents inner surfaces of the respective sub tanks from being adhered with each other.

18. (ORIGINAL) The ink jet recording apparatus as set forth in claim 17, wherein grooves are formed on surfaces of the plate member.

19 - 44 (CANCELED).

45. (CURRENTLY AMENDED) An ink supply system, comprising:

a ~~at least one~~ main tank, which stores ink therein;
a plurality of recording heads, communicated with said ~~at least one~~ main tank while providing a head difference therebetween; and

a system controller, which monitors an ink amount consumed in each recording head to
manage a residual ink amount in the ~~at least one~~ main tank.

46 - 81 (CANCELED).

82. (CURRENTLY AMENDED) The ink supply system as set forth in claim 45, further comprising a
memory for storing a residual ink amount in the ~~at least one~~ main tank.

83. (CANCELED).

AMENDMENT UNDER 37 C.F.R. §1.111
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AMENDMENTS TO THE DRAWINGS

Applicant submits herewith an amended Figure 2, to address the Examiner's concerns regarding the Figures. The proposed additions have been hi-lited for the Examiner's convenience.

Attachment: Annotated Marked-Up Drawing of Figure 2.